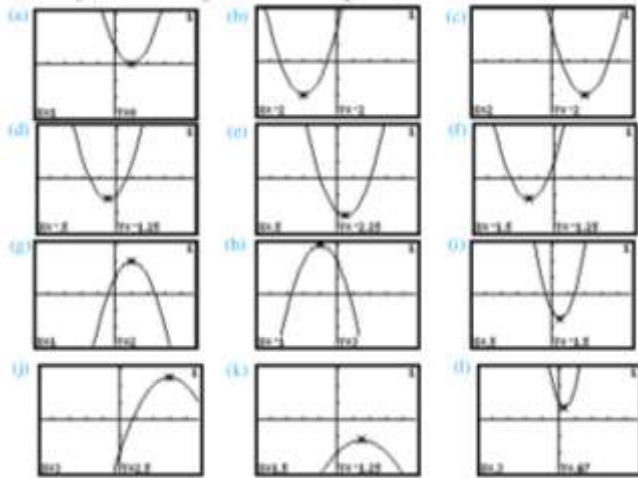
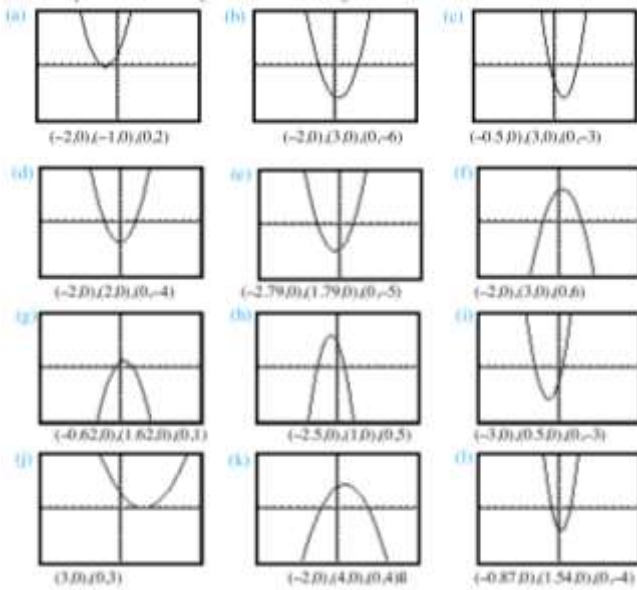


ADDITIONAL MATHEMATICS
QUADRATICS
ANSWERS

1.



2.



3.

(a) $k = \frac{9}{4}$ (b) $k < \frac{9}{4}$ (c) $k > \frac{9}{4}$ 6. (a) $k = \frac{25}{8}$

4.

(a) $k = \frac{25}{8}$ (b) $k < \frac{25}{8}$ (c) $k > \frac{25}{8}$ 7. (a) $k = a$ (b) $-1 < k < 1$ (c) $k < -1 \cup k > 1$

5.

(a) $k = a$ (b) $-1 < k < 1$ (c) $k < -1 \cup k > 1$

6.

(a) $y = \frac{5}{12}(x-2)(x-6)$ (b) $y = -\frac{3}{8}(x+4)^2$ (c) $y = \frac{1}{4}(x-2)^2 + 1$ (d) $y = 3x^2 - 6x + 7$

7-8 is 2-3

7.

- (a) $x < -2$ or $x > 1$
- (b) $-2 < x < 3$
- (c) $x \leq -0.5$ or $x \geq 3$
- (d) $-2 \leq x \leq 2$
- (e) $x \leq -2$ or $x \geq 1$

8.

(a) $-1 < k < 0$ (b) $-2\sqrt{2} < k < 2\sqrt{2}$ (c) $\pi \leq -0.5$

9.

$\sqrt{80}$

10.

1.75

12.

$\frac{23}{12}$